

Work Order ID 133953

Tuesday, June 23, 2015 3:25:24 PM

133953

Page 1

Item ID: D3903-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Spacer

Start Date: 6/20/15 Start Qty: 40.00

40

Cust Item ID:

Required Date: 6/23/15 Req'd Qty: 40.00

40

Customer:

Reference:

Run Start

NR1

Approvals:

Process Plan: W

Date: _____

Tooling: _____

Date: _____

Stop

NR2

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3903

B

100

0.00

100

Hardinge

Hardinge CNC Lathe Small

Memo

0.00

1-TURN AS PER FOLIO FA813 & DWG D3903,

FOLIO REV: AA

DWG REV: B

2-DEBURR AS REQUIRED

48

Ø

DAS

40

9-89

15/06/24

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Quality Control

Memo

0.00

48

Ø

DAS

40

9-89

15/06/24

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Page 2

Item ID: D3903-1 Accept ***N900040100*** Setup Start ***NS1***
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Start Date: 6/20/15 Start Qty: 40.00 ***40*** Cust Item ID:
Required Date: 6/23/15 Req'd Qty: 40.00 ***40*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC8- Inspect parts - second check	0.00							DAS
120						48	Ø	37	15-06-28
QC	Memo	0.00						9-89	
Quality Control									
125		0.00							
125						48	Ø	BE15-07-08	
Skidtubes	Memo	0.00							
Skidtubes	Clean spacers with Ultra Aluminum Cleaner								
	Batch: <u>N/A</u>								
130	Identify as per dwg & Stock Location: <u>LG001</u>	0.00							
130						48	Ø	BE15-07-08	
Packaging	Memo	0.00							
Packaging	LOCATION : LG001								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Req'd Qty: 40.00

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Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

MLJ JUL 08 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
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Picklist Print

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Page 1

Work Order ID: 133953

133953

Parent Item: D3903-1

D3903-1

Parent Item Name: Spacer

Start Date: 6/20/15

Required Date: 6/23/15

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6T0.375W.058		Purchased			No	100	f	176.7470	0.345	15			
M6061T6T0.375W.058										**		15/06/24	DAS 40 9-89
6061-T6 RD Tube .375 x.058W													

Location

Loc Qty

Loc Code

MAT

171.5

→ m131660

171.5

18

MAT013

5.247

m130510

5.247

DQA: _____ Date: _____

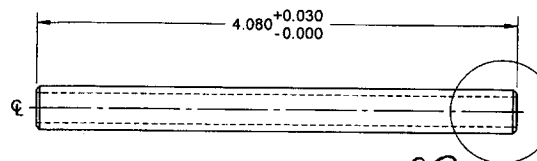
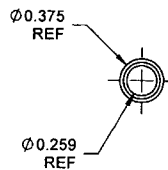


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

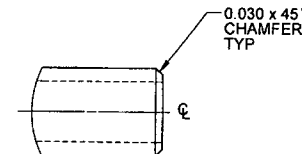
Work Order update only ☐

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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																																																																																																																	
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																																																																																																																	
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																																																																	
Past Expiry Date ☐	Manufacturing Process ☐																																																																																																																					
Misidentified ☐	Past Due ☐																																																																																																																					
Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																																																																																																																			
Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																																																																																																																			
Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																																																																																																																			
Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																																																																																																																			
Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																																																																																																																			
Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																																																																																																																			
Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																																																																																																																			
Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																																																																																																																			
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Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																																																																			
OTHER : _____																																																																																																																						



B2-1
DETAIL A

W/O 133453



DETAIL A C3-1
SCALE 2X

D3903-1 SPACER

RELEASED
09/07/03



NOTES:

- 1) MATERIAL: 6061-T6 OR 6061-T62 ALUMINUM SEAMLESS TUBING 0.375" OD x 0.058" WALL
PER WW-T-700/6 OR AMS 4080 OR AMS 4082 OR QQ-A-200/8 OR QQ-A-225/8
OR ASTM B210 OR ASTM B241 (REF DART SPEC. M6061T0.313W.058)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs

B	CORRECT TYPO Ø 0.375 WAS Ø 0.313 (ZN A6-1)	RF	09.06.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.06.30		

DART AEROSPACE USA, INC.		REV. B
PORT HADLOCK, WA		SHEET 1 OF 1
DRAWING NO.	D3903	
TITLE	SPACER	SCALE
		NTS

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